

THE UNIVERSITY OF WISCONSIN  
MADISON, WISCONSIN, U. S. A.

DEPARTMENT OF BOTANY  
BIOLOGY BUILDING

October 12, 1946

Mr. Joshua Lederberg  
Osborn Botanical Laboratory  
Yale University  
New Haven, Conn.

My Dear Mr. Lederberg,

I have before me a request for some of my reprints by you, dated February 1945. I believe that, being always on the move, I have neglected to fill that request. I am therefore sending you now under separate cover the second paper you asked for, the first one no longer being available. I hope you will forgive me and comply with a request I have to make of you more speedily than I did with yours.

I was very much interested in the data you gave at the Cold Spring Harbor Symposium and have promised to give a short seminar talk here, on the subject of "Sex and segregation in bacteria". I have only very sketchy notes from the meeting to go by since I have not yet seen your material in print. Put me straight if I'm wrong. If your data have not yet appeared would you be so kind as to check, correct and supplement the enclosed notes, and send them back to me. Particularly I should like to know what the B, M, P, T designations stand for, any figures or numbers that you may have. If you have found contradictory evidence in the meantime, I should very much like to have that too. I hope you will answer me promptly and put my name on your mailing list for the forthcoming paper.

I also hope to get a chance to talk further with you if you are going to attend the AAAS meetings in Boston at Xmas.

Yours sincerely

Lotti M. Steinitz

sent copy of manuscript

*Lotti Steinitz*

Some Evidence for Sex and Segregation in Bacteria.

Discussion at the Cold Spring Harbor Symposium 1946 by Joshua Lederberg.

Working with mutant strains of E.coli found spontaneous reappearance of the wild type only once in 10 000 000. (?)

Starting with certain mutants (which ?)

he made mixed cultures of two double mutants ( $B^-M^-P^+T^+$ ) and ( $B^+M^+P^-T^-$ )

The wild type appeared in these mixed cultures. On isolation it was possible to obtain lines that were homogeneous for all (?) possible combinations of the characters involved.

No single spore isolations were made, but the serial dilution technique was used, which insures with a high degree of certainty that the isolates no longer consisted of mixed clones of the original strains.

It might be argued that we here still have some form of symbiosis of different genetic types, however, the evidence at least suggests strongly that there is true exchange of characters, which would indicate some sort of sexual mechanism in bacteria.

L.M.Steinitz